

10/078,071

**Notice of Allowability**

Application No.

10/078,071

Examiner

Roy M. Punnoose

Applicant(s)

VATUS ET AL.

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to letter received April 05, 2004.
2. ☒ The allowed claim(s) is/are 1-22.
3. ☒ The drawings filed on 13 February 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 2/2002; 10/2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

GREGORY J. POATLEY, JR.  
PRIMARY EXAMINER SPE 2877

**DETAILED ACTION**

***EXAMINER'S AMENDMENT***

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Atty. Michael A. Bernadicou (Registration No. 35,934) on October 26, 2004.

The examiner's amendment was done to cancel claims 23-25.

2. The claims have been amended as follows:
  - a. Cancel claims 23-25.

***Allowable Subject Matter***

3. Claims 1-22 are allowable.
4. Claims 1 and 7 are allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious a method comprising measuring a test variable of a test layer formed on a test substrate in a processing chamber, and using the test variable to select a reference process condition in a consolidated data set of reference variables against reference process variables, a location of the reference process condition among the reference process variables depending on a location of the test variable among the reference variables, in combination with the rest of the limitations of said claims.
5. Claims 2-6 and 8 are allowable because they are dependent on independent claims 1 and 7 respectively, or an intermediate claim.

Art Unit: 2877

6. Claim 9 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious a method comprising forming a test layer on the surface of a test substrate while a heater creates a test heat flux over the surface of the test substrate in a processing chamber, comparing a test variable indicative of growth rate of the test layer with a reference variable indicative of growth rate of a reference layer when a reference heat flux is created over a surface of a reference substrate, inserting a process substrate into the processing chamber, and setting the heater to create a process heat flux over a surface of the process substrate, the process heat flux being selected based upon the comparison of the test variable with the reference variable, in combination with the rest of the limitations of said claim.

7. Claim 10 is allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious a method comprising forming a test layer on the surface of a test substrate in a processing chamber while a heater creates a test heat flux over the surface of the test substrate, utilizing a pyrometer to detect infrared radiation from the test layer while the test layer is being formed, the pyrometer generating a signal varying with variations in magnitude of the infrared radiation, calculating a test value indicative of a length of a period of the signal, selecting a desired process value from data of different reference process values, comparing the test value with a desired reference value, and adjusting the heater based upon said comparison, in combination with the rest of the limitations of said claim.

8. Claims 11-22 are allowable because they are dependent on independent claim 10, or an intermediate claim.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

Art Unit: 2877

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Roy M. Punnoose** whose telephone number is **571-272-2427**.

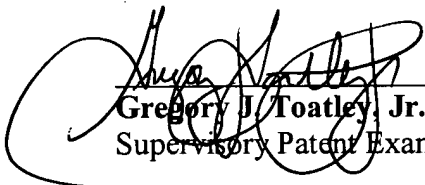
The examiner can normally be reached on 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Gregory J. Toatley, Jr.** can be reached on **571-272-2800 ext.77**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Roy M. Punnoose**  
Patent Examiner  
Art Unit 2877  
October 26, 2004



  
**Gregory J. Toatley, Jr.** *SP2877*  
Supervisory Patent Examiner